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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,782	12/18/2001	Cyrus E. Tabery	50432-293	1966

20277 7590 07/26/2002  
MCDERMOTT WILL & EMERY  
600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

EXAMINER

ISAAC, STANETTA D

ART UNIT	PAPER NUMBER
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2812

DATE MAILED: 07/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/021,782	TABERY ET AL.	
	Examiner	Art Unit	
	Stanetta D. Isaac	2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-14 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All   b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 3, 8, 10, 11, and 14 rejected under 35 U.S.C. 102(a) as being clearly anticipated by Yamazaki et al. Patent Number 6242292.

Yamazaki discloses:

(See FIG. 5; col. 6 lines 6-8, 25-25, 30-31, 35-39; col. 9 lines 26-31, 37-38, 42-50)

1. A method of manufacturing a semiconductor device, comprising the steps of:  
forming a gate electrode over a substrate;  
introducing ions into the substrate to form source/drain regions in the substrate proximate to the gate electrode;  
activating a portion of the source/drain regions by laser thermal annealing using a laser;  
moving the laser and the substrate relative to one another; and  
activating another portion of the source/drain regions by laser thermal annealing using the laser,  
wherein the movement of the laser and the substrate relative to one another is continuous between  
and during the steps of activating the portion of the source/drain regions and activating the other portion of the source/drain regions.

3. The invention according to claim 1, wherein each portion of the source/drain regions receives more than one single pulse of energy from the laser.

8. The invention according to claim 6, wherein each portion of the source/drain regions receives more than one single pulse of energy from the laser.

9. The invention according to claim 8, wherein each pulse from the laser respectively irradiates non-identical portions of the source/drain regions.

10. The invention according to claim 6, wherein the laser and the substrate move relative to one another at a constant velocity.

11. A method of manufacturing a semiconductor device, comprising the steps of:  
forming a gate electrode over a substrate;  
introducing ions into the substrate to form source/drain regions in the substrate proximate to the gate electrode;  
activating a portion of the source/drain regions by laser thermal annealing using a pulse of laser energy from a laser;  
moving the laser and the substrate relative to one another; and  
activating another portion of the source/drain regions by laser thermal annealing using another pulse of laser energy from the laser,  
wherein the laser and the substrate move after each pulse of laser energy and each portion of the source/drain regions receives more than one single pulse of energy from the laser.

14. The invention according to claim 11, wherein the laser and the substrate move relative to one another at a constant velocity.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, 5-7, 9 12, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. Patent Number 6242292.

Yamazaki discloses the claimed invention except for the use of one pulse single pulse to of energy, laser irradiates non-identical portions, and a spot area of the laser on the substrate is less than 50 millimeters <sup>2</sup>. It would have been obvious

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to one of ordinary skill in the art at the time of the invention was made to use a single pulse, non-identical portions, and a spot area of the laser on the substrate to be less than 50 millimeters<sup>2</sup>, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, USPQ 284 (CCPA 1954).

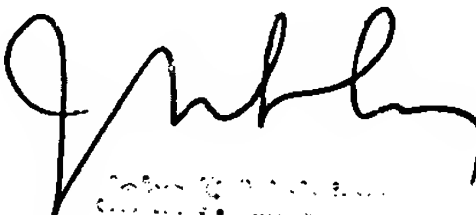
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanetta D. Isaac whose telephone number is 703-308-5871. The examiner can normally be reached on Monday-Friday 7:30am -5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Nebling can be reached on 703-308-3325. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Stanetta Isaac  
Patent Examiner  
July 23, 2002



John G. Nebling  
Supervisor  
Art Unit 2812